If you are using a printed copy of this procedure, and not the on-screen version, then you <u>MUST</u> make sure the dates at the bottom of the printed copy and the on-screen version match.

The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A

## C-A OPERATIONS PROCEDURES MANUAL

# 8.31.h C-A Water Tanker Cleaning Procedure

Text Pages 2 through 4

Attachment

# **Hand Processed Changes**

| HPC No. | <u>Date</u>   |    | Page Nos. | <u>Initials</u> |      |
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|         | Approved: <u>Signature on File</u> Collider-Accelerator Department Chairman |    |           |                 | Date |
|         | Confider-Accelerator Department Chairman                                    |    |           |                 |      |

M. Van Essendelft

# 8.31.h C-A Water Tanker Cleaning Procedure

## 1. Purpose:

To provide instructions to Water Systems Group for cleaning Water Tanker compartments.

# 2. Responsibilities:

- 2.1 Water systems technicians are responsible to operate and service water tankers.
- 2.2 Perform work effectively and safely
- 2.3 Minimize waste
- 2.4 Stop Work if the procedure has changed or if unsafe conditions are encountered

# 3. <u>Prerequisites:</u>

- 3.1 Rad Worker Training TLD (Whole Body Dosimetry).
- 3.2 Working knowledge of the processes described in this procedure.
- 3.3 Contamination Worker Training.
- 3.4 Personal Protective Equipment (PPE) shall include rubber gloves and a rubber apron throughout the task. Use of a face shield is required whenever there is a chance of splashing, such as while draining, disassembling, cleaning, and venting of the components, before and after repairs.
- 3.5 Appropriate fall protection shall be in place on the top of the tankers prior to commencing work.

#### 4. **Precautions:**

- 4.1 The CAD Environmental Coordinator determines ultimate disposition of the bag filters. Notification of RCD Representative should be made in advance of the work to coordinate necessary support.
- 4.2 A determination will be made by RCD if radiological triggers are exceeded, which in turn will require a job specific RWP, as outlined in <a href="C-A-OPM 9.5.4">C-A-OPM 9.5.4</a>, "Radiation Work Permit".

#### 5. Procedure

- 5.1 Place secondary containment under the drain valve of the tank compartment that is being washed.
- 5.2 Place a 100 micron bag filter on the drain line of the compartment being flushed and secure it sufficiently with tie wraps.
- 5.3 Open drain valve above bag filter.
- Turn knob to open internal high hat. Check that the knobs for the other high hats are closed and then pump lever to open high hat.
- 5.5 As required, lower or raise the front end of the tanker to allow for an appropriate water flow to the internal high hat.
- 5.6 Run a suction line from the secondary container to the pump inside the building. Check the pump inside the building to ensure that the attached bag filter is new and that it is the appropriate size (100 micron).
- 5.7 Attach a hose to the discharge side of the pump and place the hose into a 55 gallon drum.

#### **CAUTION:**

Before proceeding to step 5.8 ensure that fall protection is in place.

5.8 Climb up to the tanker fill port with the washing hose and begin washing the inside of the tank.

#### **WARNING:**

No entry into the tanker, at any time, is permitted. The tank is a confined space.

- 5.9 Stop washing operation regularly and climb down to check for leaks and that the bag filter at the outlet of the tank is not overflowing.
- 5.10 Continue washing the tank if the bag filter is operating properly and there are no leaks. As necessary, change and re-secure the bag filter to ensure proper operation.
- 5.11 Periodically pump the secondary containment through the second bag filter and back into another tanker compartment or into a 55 gallon drum to prevent overflow.

#### **NOTE**:

# All clean waste water shall be returned to a tanker compartment for holding.

- 5.12 Continue the operation until the tanker compartment is clean and then proceed to the next compartment and repeat the steps listed above.
- 5.13 Contact FS Representative to check bag filters and store bags, appropriately, based on the results of the HP check.
- 5.14 Contact the Environmental Coordinator for bag filter and debris disposal determination.

# 6. <u>Documentation</u>

None

# 7. <u>References</u>

- 7.1 C-A-OPM-ATT 10.1.d "Operator Response to Water Spills".
- 7.2 C-A-OPM 9.5.4, "Radiation Work Permit".

# 8. Attachments

None